

Applicant guidance notes

Completing the ISDE Task Force Proposal Form

These notes explain the parts of the form that require interpretation or judgment. They should be read together with the instructions already provided in the form **ISDE-FRM-TF-001: ISDE Task Force Proposal v1.1**

If information is not yet known, write “*to be confirmed*” and state what needs to be confirmed and, where possible, by when.

Questions that cannot be resolved using these notes should be directed to the ISDE Secretariat through the contact details given in the current Open Call.

Key concepts

ISDE Task Force

A Task Force is a temporary delivery team established to produce one or more defined outputs within an agreed period. It is not an open-ended discussion group or permanent committee.

Working Group

A Working Group is a continuing stewardship body. It convenes expertise, develops a field over time and may initiate Task Forces to deliver specific outputs.

A successful Task Force does not automatically become a Working Group.

Digital Earth Framework

The Twelve Digital Earth Frameworks describe the enduring strategic and conceptual roles of Digital Earth. They provide the lens through which ISDE assesses the purpose and significance of a proposal.

For example:

- *Supersense and Perception concerns the integration of sensing and observation into meaningful situational awareness.*
- *Meta-Design Space for Planetary Futures concerns scenario exploration and the design of possible futures.*
- *Strategic Intelligence and Decision Theatre concerns converting complex evidence into forms that support deliberation and decisions.*

The Frameworks provide strategic direction. They are not individual projects or technologies.

Digital Earth Enabler

A Digital Earth Enabler, or DEE, is an operational capability, method or instrument that helps turn a Framework into practical use.

The six DEE clusters are:

1. Interoperability
2. Trust and Traceability
3. Foresight and Planning
4. Learning and Participation
5. Implementation
6. Meta-Governance

Examples include reference models, data specifications, scenario methods, curricula, implementation toolkits, registries and governance instruments. The DEE taxonomy provides the delivery portfolio against which Task Force outputs can be classified and stewarded.

DEE asset

A DEE asset is a reusable output produced through ISDE activity and accepted through the relevant review and registration process.

Examples include:

- *a technical reference model;*
- *a tested methodology;*
- *a toolkit;*
- *a standard or specification;*
- *a curriculum module;*
- *a case-study collection;*
- *a governance instrument;*
- *a demonstrator;*
- *an implementation guide.*

A proposed output does not become an approved DEE asset merely because it is listed in this form.

Taskforce Registry and DEE Asset Registry

These are separate records:

- the Taskforce Registry records the temporary delivery body, its mandate, leadership, dates and status;
- the DEE Asset Registry records the accepted outputs, their version, ownership, stewardship and review status.

Example used in these notes

The examples refer to a possible:

Digital Earth Coastal Flood Resilience Demonstrator Task Force

Its purpose would be to develop and test a repeatable workflow combining Earth observation, elevation, tide, land-use, infrastructure and population-exposure data for coastal flood scenario planning in three regions.

This example is illustrative only and does not represent an approved ISDE Task Force.

1. Proposal summary and gateway test

Task Force title and summary

Use a title that makes the proposed output or delivery purpose clear.

Example

Digital Earth Coastal Flood Resilience Demonstrator Task Force

The summary should briefly state:

- *the problem;*
- *the main deliverable;*
- *how it will be tested;*
- *the proposed duration; and*
- *its value to ISDE.*

Example

This proposal seeks to establish a twelve-month Task Force to develop and test a repeatable Digital Earth workflow for coastal flood scenario planning. The workflow will integrate open Earth observation, elevation, tide, land-use,

infrastructure and population-exposure data in three regional case studies. The Task Force will deliver a demonstrator, technical reference model, case studies and implementation guide for ISDE review.

Proposal origin

Select the source that most accurately describes how the proposal arose.

Do not select Council resolution or Bureau direction unless there is a recorded decision or instruction.

The origin reference should provide a resolution number, meeting date, event outcome or other traceable source.

Example

Proposed following a cross-regional discussion on coastal resilience. Sponsoring Chapter and formal meeting reference to be confirmed.

Gateway test

The gateway questions determine whether a Task Force is the appropriate delivery mechanism.

Answer Yes only where the proposal has:

- a defined period;
- identifiable outputs;
- a clear acceptance and closure pathway;
- genuine Framework and DEE alignment; and
- no need for a permanent Working Group to deliver the immediate output.

Example

The Task Force will operate for twelve months, produce a tested demonstrator and implementation guide, undergo technical review and close after the final outputs have been submitted and recorded.

A No answer should normally lead to rescoping or consultation with the Secretariat before submission.

2. Purpose, problem and beneficiaries

Problem, opportunity or Council need

Describe the practical gap being addressed, not only the importance of the general subject.

Example

Coastal agencies often hold satellite imagery, elevation, tide and exposure information in separate systems. Different methods and data conditions make it difficult to compare scenarios or transfer useful approaches between regions.

Why ISDE is the appropriate delivery home

Explain why the work requires international Digital Earth coordination rather than delivery by one institution.

Example

The work requires Earth observation, interoperability, spatial modelling, planning and regional knowledge. ISDE can test a common approach across different regions without requiring a single platform or vendor.

Intended beneficiaries and institutional value

Identify who will use the outputs and how ISDE will benefit.

Example

Beneficiaries include coastal planning agencies, disaster-risk organisations, local governments, researchers and ISDE Chapters. The work would give ISDE a credible cross-regional demonstrator and reusable material for publications, events, learning and regional engagement.

Relationship to existing work and evidence base

Identify relevant ISDE Frameworks, Working Groups, Task Forces, publications, events, Chapters, Hubs or approved governance instruments.

List the principal documents, research or operational evidence supporting the proposal.

Do not provide a long bibliography. Include only sources that materially support the case.

3. Scope and boundaries

In scope

State what the Task Force will do.

Example

Define minimum data requirements, develop a common scenario workflow, test it in three regions, document uncertainty, and prepare a demonstrator and implementation guide.

Out of scope

State what the Task Force will not do.

This is important where the proposed work could otherwise be mistaken for an operational service, certification or permanent programme.

Example

The Task Force will not operate a real-time warning service, produce legally authoritative hazard maps, endorse commercial platforms or maintain the demonstrator indefinitely.

Assumptions, dependencies and constraints

Identify conditions that may affect delivery.

Example

Delivery depends on access to appropriately licensed datasets and local contributors able to validate the interpretation of regional data. Differences in data quality may limit direct comparison.

Sensitive exclusions or matters requiring separate approval

Identify anything that may create an external, financial, legal, ethical or reputational commitment.

Example

Public release, use of restricted data, formal partner commitments and presentation of outputs as official hazard advice would require separate approval.

4. Deliverables and acceptance

Primary deliverable

Describe the main output in concrete terms.

Example

A tested Digital Earth coastal flood scenario demonstrator and practical implementation guide, validated through three regional case studies.

Avoid describing an activity as the deliverable. “Holding workshops” is an activity. A “reviewed workshop outcomes report and implementation guide” is a deliverable.

Deliverable type

Tick only the categories that accurately describe the output.

For the example:

- *Demonstrator pilot*
- *Technical reference model*
- *Case-study collection*
- *Toolkit*

Intended audience

Identify the main users because this affects language, detail and presentation.

Example

Coastal planners, disaster-risk practitioners, researchers and ISDE Regional Chapters.

Acceptance method

Explain how the Task Force and ISDE will know that the output is complete and fit for its intended purpose.

Useful acceptance criteria may include:

- successful testing in agreed cases;
- compliance with a minimum data or documentation specification;
- technical review;
- user review;
- documented assumptions and limitations;
- submission to an identified ISDE body.

Example

The workflow must be applied in three case studies, document data provenance and uncertainty, and pass technical and user review against criteria agreed at commencement.

Proposed reviewer or accepting body

Name the proposed body where known. Do not imply that it has already agreed to accept the output.

Example

Technical reviewers and accepting body to be designated through the ISDE review pathway.

Proposed DEE asset status

State whether the deliverable may become a reusable DEE asset.

Example

Candidate Implementation and Foresight and Planning DEE assets, subject to review and registration.

Publication or circulation pathway

State whether the output is intended for:

- internal review;
- limited circulation;
- publication;
- an ISDE event;
- an ISDE journal;
- public release.

Example

Drafts will remain internal. Public release or presentation will occur only after the relevant approval.

Versioning expectation

Indicate whether the first accepted output is intended as a stable one-off product or the first version of an asset requiring future maintenance.

Example

Version 1.0 will record the tested workflow. Any later revision will require an identified custodian and review pathway.

5. Milestones, workplan and closure

Milestones should describe the principal delivery stages, not every meeting.

Example

1. *Leadership, case studies and workplan confirmed.*
2. *Data requirements and user needs agreed.*
3. *Draft workflow and technical reference prepared.*
4. *Three case studies tested and reviewed.*
5. *Final outputs submitted.*

Closure condition

State the objective event that ends the Task Force.

Example

The Task Force closes when the agreed deliverables have been submitted, review comments have been addressed, final status has been recorded, and responsibility for retained outputs has been assigned or formally left to be determined.

Closure report

The closure note should record:

- *outputs delivered;*
- *review results;*
- *unresolved issues;*
- *lessons learned;*
- *recommendations;*
- *proposed custodian;*
- *any further approval required.*

6. Framework and DEE alignment

This section is to align the taskforce with one or more of the 12 thematic frameworks of digital earth. These serve as lenses into the evolving digital earth vision. A summary of these frameworks is given in the appendix of this document.

Framework alignment

Select the Frameworks that best explain the strategic role of the work. Do not select every Framework with an indirect connection.

For the coastal example:

- *Framework 3, Supersense and Perception, because the work combines observation and sensing into situational awareness.*

- *Framework 9, Meta-Design Space for Planetary Futures, because it explores alternative flood and adaptation scenarios.*
- *Framework 12, Strategic Intelligence and Decision Theatre, because it presents complex evidence for planning and deliberation.*

Selecting DEE clusters

Select the operational clusters to which the outputs will contribute.

For the coastal example:

- *Interoperability, through a common data and workflow specification;*
- *Foresight and Planning, through scenario modelling;*
- *Implementation, through a tested demonstrator and guide.*

Explaining alignment

Explain what the Task Force will contribute, not merely what the Framework or cluster means.

Example

The Task Force will integrate multiple coastal datasets through a reusable workflow, test alternative flood scenarios, and provide practical guidance for regional application. Its outputs therefore contribute to Interoperability, Foresight and Planning, and Implementation.

Expected DEE asset contribution

Describe the reusable output.

Example

A minimum data specification, scenario workflow, technical reference model, implementation guide and documented case-study pattern.

Registration pathway

Describe how the proposed asset would move from Task Force output to reviewed ISDE asset.

Example

Candidate outputs will be submitted to the Secretariat after technical review. Asset classification, version, custodian and review date will be confirmed through the DEE Asset Registry process.

Post-closure custodian

Identify who may maintain the output after the Task Force closes.

This might be:

- *an existing Working Group;*
- *the Secretariat;*
- *a Standing Committee;*
- *a Regional Hub;*
- *another Council-approved body.*

Write "to be confirmed" where no suitable custodian has yet been identified.

7. Leadership, membership and liaison

The proposed team should contain the expertise and regional knowledge needed to deliver the work.

For the coastal example, this may include:

- *Earth observation;*
- *coastal hazards or hydrodynamic modelling;*
- *geospatial interoperability;*
- *planning;*
- *disaster-risk practice;*
- *data governance;*
- *regional case-study knowledge.*

Regional and disciplinary coverage

Explain whether the team reflects the regions affected and the disciplines required.

Do not add members only to create an appearance of geographic balance. Contributors should have a defined role.

Expertise gaps

Identify missing capability honestly.

Example

Further expertise is required in community engagement, Indigenous and local knowledge, and legal interpretation of public hazard information.

Conflicts of interest

Declare any interest that could affect, or appear to affect, judgement.

Example

Two contributors work with commercial modelling platforms. The demonstrator will remain platform-neutral and all software dependencies will be disclosed.

8. Governance, reporting, resources and risk

Reporting and escalation

State:

- how often reports will be provided;
- who receives them;
- what events require escalation.

Example

Updates will be provided every two months. Escalation will occur if scope materially changes, delivery is delayed by more than two months, data cannot be lawfully used, external commitments arise, or public release is proposed.

Secretariat support

Request only the support necessary for delivery.

Example

Confirmation of the review pathway, access to relevant ISDE templates, assistance identifying a liaison, and coordination of final review.

Funding and in-kind support

State clearly:

- whether ISDE funding is requested;
- what contributors will provide;
- whether later costs may arise.

Example

Contributors will provide time and open-source tools in kind. No ISDE funding is requested at proposal stage. Any later hosting, travel or data costs will require separate approval.

Risks and mitigations

List credible risks and match each with a practical response.

Risk	Mitigation
<i>Data quality varies between regions</i>	<i>Define minimum requirements and document limitations</i>
<i>Data licensing restricts reuse</i>	<i>Prefer open data and verify licences before use</i>
<i>Outputs are mistaken for official forecasts</i>	<i>State clearly that the demonstrator is a planning tool</i>
<i>Local context is poorly represented</i>	<i>Require validation by regional contributors</i>
<i>Commercial influence affects technical choices</i>	<i>Maintain platform neutrality and disclose dependencies</i>
<i>Scope expands beyond the mandate</i>	<i>Confirm boundaries and manage changes through escalation</i>

Proportional business case

Complete the Five Case summaries only where one or more triggers apply. The form identifies triggers such as external partners, funding, pilots, public-facing tools, AI, sensitive data, financial mechanisms, policy positions and reputational sensitivity.

The five summaries answer different questions:

- Strategic case: Why should ISDE undertake this work?
- Economic or public value case: What value may result?
- Commercial or partnership case: What external relationships, rights or obligations are involved?
- Financial or resource case: What will it cost and who will provide the resources?
- Management and delivery case: How will the work be governed and delivered?

Keep the response proportionate. A modest demonstrator may need only a short paragraph under each relevant heading.

9. Future Working Group pathway

A Task Force should not be used as an indirect route to establish a permanent body.

- Select No where the output can be delivered, transferred and closed.
- Select Yes only where there may be a genuine future need for continuing stewardship.

Evidence supporting a later Working Group may include:

- continuing demand from several regions;
- an active international membership;
- recurring outputs;
- an enduring research, policy or standards agenda;
- a need for ongoing asset maintenance;
- clear institutional value beyond the original Task Force.

Example

No Working Group is proposed at this stage. Continuing stewardship should be considered only if several regions adopt the workflow and regular updates are required.

Continuing asset and steward

State what will remain after closure and who may maintain it.

Example

The workflow, reference model, case studies and implementation guide will remain. The custodian will be confirmed before closure through the relevant ISDE process.

Final check

Before submission, confirm that:

- the problem and ISDE role are clear;
- the scope and exclusions are defined;
- the primary deliverable is tangible;
- the acceptance method is credible;
- the Framework and DEE selections are explained;
- the milestones lead to an objective closure condition;
- the team has the required expertise;
- risks and mitigations are paired;
- external, financial, data, AI and reputational issues are disclosed;
- the proposed post-closure asset and custodian are identified;
- all required declarations are completed.

Appendix A: The Twelve Digital Earth Thematic Frameworks

The Twelve Digital Earth Thematic Frameworks provide a shared strategic architecture for describing the roles and capabilities of Digital Earth. They are conceptual lenses, not individual projects, technologies or technical standards.

Tier 1: Foundational Systems

Purpose: Defines the systemic architecture, technical foundations and knowledge conditions required for Digital Earth.

No.	Thematic Framework	Summary description
1	Digital Earth as a Dynamic Complex Adaptive System	Understands Digital Earth as an evolving planetary-scale system shaped by interactions among environmental, social, economic and technological systems. Feedback, learning and adaptation allow it to respond to changing conditions.
2	Digital Earth as a Cyber-Physical Continuum	Connects the physical and digital worlds through sensors, Earth observation, data cubes, digital twins, models and simulations. It supports continuous exchange between observed conditions, digital representations and real-world action.
3	Digital Earth as a Supersense and Perception	Extends human perception by combining observation, data fusion, artificial intelligence and visualisation. It helps reveal environmental and social patterns that may otherwise be difficult to detect or understand.
4	Digital Earth as a Sustainable Computational Substrate	Provides the computing, storage and communications foundations needed for Digital Earth while promoting energy efficiency, resilient infrastructure, responsible resource use and equitable access.
5	Digital Earth as a Trust and Compliance Infrastructure	Establishes confidence in data, models and digital processes through provenance, identity, consent, security, compliance controls and auditability.

Tier 2: Enabling Infrastructures

Purpose: Converts observations, data and models into governable knowledge, value, foresight and coordinated action.

No.	Thematic Framework	Summary description
6	Digital Earth as a Value Exchange Infrastructure	Connects verified information and measurable performance to economic, environmental and social value. It supports transparent accounting, incentives and value-exchange mechanisms that encourage responsible stewardship.
7	Digital Earth as an Ethical Governance System	Embeds rights, responsibilities, fairness, transparency and plural representation into Digital Earth. It addresses data consent, responsible artificial intelligence, cultural sensitivity and accountable decision-making.
8	Digital Earth as a Knowledge Federation	Connects distributed scientific, technical, policy, Indigenous, local and community knowledge without requiring it to be held in one system. It preserves provenance, context and custodianship.

9	Digital Earth as a Meta-Design Space for Planetary Futures	Provides an environment for exploring, designing and testing possible futures through scenarios, simulations, digital engineering and participatory foresight.
---	---	--

Tier 3: Human-Centric Applications

Purpose: Translates Digital Earth capability into learning, participation, cultural meaning, foresight and practical decision support.

No.	Thematic Framework	Summary description
10	Digital Earth as a Learning and Empowerment Platform	Strengthens spatial literacy, education, professional capability and community participation. It helps people understand complex issues and contribute to decisions affecting their places and futures.
11	Digital Earth as a Cultural Memory and Storytelling Hub	Preserves and connects cultural heritage, memory, identity, local knowledge and place-based narratives while respecting cultural rights, attribution and custodianship.
12	Digital Earth as a Strategic Intelligence and Decision Theatre	Integrates data, models, scenarios, narratives, uncertainty and ethical considerations into an environment for assessing risk, comparing options, understanding trade-offs and coordinating action.

12 Thematic Frameworks

